UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,712	11/14/2003	Hiu-Ming Eric Lam	MSFT125569	2286

			EXAMINER
38991	7590	12/15/2006	GORTAYO, DANGELINO N

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

ART UNIT	PAPER NUMBER
2168	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/713,712	LAM ET AL.
	Examiner	Art Unit	
	Dangelino N. Gortayo	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 4 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In the amendment filed on 9/6/2006, claims 1-4, 6, 9-11, 13-23, 26-28, 30-31 have been amended. The currently pending claims considered below are Claims 1-31.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "a behavior" in line 12. There is insufficient antecedent basis for this limitation in the claim. In the amendment, the applicant deletes the word "query" before behavior. The limitation is unclear as to what it is referring to, and fails to narrow down the claim. Proper correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-5, 7-11, 13-14 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. For an invention to be statutory, an invention must disclose a "useful, tangible, and concrete result". The claimed invention

as a whole must be useful and accomplish a practical application. That is, it must

produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373-74, 47

USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to

inventions that possess a certain level of "real world" value, as opposed to subject

matter that represents nothing more than an idea or concept, or is simply a starting

point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148

USPQ 689, 693-96 (1966)); In re Fisher, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir.

2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir.

1993)).

Independent claim 1 recites the limitation "for each data store, a provider plug-in

to the object-oriented heterogeneous data store interface". The claim fails to produce a

tangible result. Rather, the claim outlines the system components and the rules

governing the system, with no result produced from the data. There is no following step

that shows a result of the computerized system and the provider plug-in. Therefore the

claim is rendered non-statutory. Proper correction is required.

Independent claim 13 recites the limitation "providing the first query component

to a data store component of the object oriented heterogeneous data store interface".

The claim fails to produce a tangible result. Rather, the claim shows a computer-

readable storage medium with steps in a method to set up a query component, with no

result produced from the data once a query is made. There is no following step that

shows a result of a query from the storage medium. Therefore the claim is rendered

non-statutory. Proper correction is required.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

7.   Claims 23-28 are rejected under 35 U.S.C. 102(e) as being unpatentable over

Tamboli et al. ("Tamboli" US Patent 6,792,431)

      As per claim 23, Tamboli teaches "a computerized system" (see Abstract)

"comprising: at least one data store, each data store comprising a different data

store type, each data store capable of storing at least one data store object;" (Figure 1

reference 106, 134, 202, column 6 lines 53-60, and column 7 lines 16-35, wherein

multiple data repositories are capable of storing data in multiple internal data formats)

      "an object-oriented heterogeneous data store interface comprising at least one

data store object component corresponding to at least one of said at least one data

store object stored in said at least one data store;" (Figure 1 reference 116, 244 ,

column 8 lines 27-50, and column 13 lines 14-26, wherein a user interface in a data

integration application communicates with adaptors to read data from multiple data

repositories).

"a data store object design graphical user interface configured to enable building

of a graphical representation of each data object corresponding to at least one data

store object component of the object-oriented heterogeneous data store interface;"

(column 12 line 18 – column 13 line 26, wherein a user interface displays data in data

repositories)

"and a data store object source code generator capable of generating object-

oriented programming language source code for each data store object component of

the object-oriented heterogeneous data store interface." (Figure 5, Figure 9, and column

16 line 40 – column 17 line 67, wherein data is created that represents individual data in

the data repositories, by the adaptor and by a spider)

As per claim 24, Tamboli teaches "an extensible markup language (XML) data

store object definition generator configured to generate an extensible markup language

(XML) data store object definition from the graphical representation in accordance with

an extensible markup language (XML) data store object definition schema." (column 10

line 32-58 and column 16 line 31-39, wherein XML stylesheets are used to translate

data, returning a new XML document)

As per claim 25, Tamboli teaches "the data store object source code generator

generates object-oriented programming language source code for each data store

object component corresponding to the extensible markup language (XML) data store

object definition generated from the graphical representation." (column 7 lines 36-60,

column 10 lines 32-58)

As per claim 26, Tamboli teaches "the extensible markup language (XML) data store object definition comprises at least one data store object definition element containing at least one data store object attribute definition element, and each data store object attribute definition element includes a defer property specifying that retrieval of the data store object attribute is deferrable." (column 7 line 36 – column 8 line 13 and column 15 line 33-54, wherein data attributes are mapped to XML stylesheets)

As per claim 27, Tamboli teaches "at least one of said at least one data store object attribute definition element defines a data object attribute referencing a list of data store objects stored in said at least one data store;" (column 10 line 59-67, column 11 lines 17-28, column 12 lines 23-34, column 15 lines 26-45, wherein a catalog holds metadata for data repositories)

"and each data store object attribute definition element that defines the data object attribute referencing the list of data store objects further includes a schema path property specifying, at least: a type of data store object in the list of data objects;" (column 12 lines 23-34)

"a first attribute of each data store object in the list of data objects;" (column 13 lines 27-36)

"a second attribute of the data store object corresponding to the data store object definition element containing the data store object attribute definition element;" (column 13 lines 37-53)

"and a relationship between the first attribute and the second attribute." (column 13 lines 53-65)

As per claim 28, Tamboli teaches "the schema path property specifies: more

than one type of data store object;" (column 16 lines 40-58)

"and at least one relationship between attributes of each data store object."

(column 16 lines 3-29)

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tamboli et al. ("Tamboli" US Patent 6,792,431) in view of Prompt et al. (US Patent

6,985,905 B2)

As per claim 1, Tamboli teaches "at least one data store, each data store

comprising a different data store type configured to store at least one data store object;"

(Figure 1 reference 106, 134, 202, column 6 lines 53-60, and column 7 lines 16-35,

wherein multiple data repositories are capable of storing data in multiple internal data

formats)

"an object-oriented heterogeneous data store interface comprising: a data store

component corresponding to each data store;" (Figure 1 reference 116, 244 , column 8

lines 27-50, and column 13 lines 14-26, wherein a user interface in a data integration

application communicates with adaptors to read data from multiple data repositories)

"and for each data store, a provider plug-in to the object-oriented heterogeneous

data store interface, and each provider plug-in comprises at least one provider

component configured with a behavior conforming to the query component behavior

specification of the provider interface." (Figure 1 reference 102, 124, 204 and column 8

lines 27-50, wherein an adaptor is made for each data repository)

Tamboli does not teach "a query component comprising a query specification

attribute; and a provider interface comprising a query component behavior specification

specifying a query behavior with said query specification attribute of said query

component;" Prompt teaches "a query component comprising a query specification

attribute; and a provider interface comprising a query component behavior specification

specifying a query behavior with said query specification attribute of said query

component;" (column 19 lines 18-53, wherein querying multiple databases is achieved

specifying an object and broken down into commands embedded in the query). It would

have been obvious for one of ordinary skill in the art to combine Tamboli's system to

read and transfer data between multiple databases that use different data formats with

Prompt's ability to query data in multiple databases using a generated query in

compatible format. This gives the user the advantage of being able to communicate

more information between databases that utilize different data formats. The motivation

for doing so would be to provide a user with a finer level of granularity when accessing

multiple divergent database sources. (column 5 lines 3-20)

As per claim 2, Tamboli teaches "the data store component comprising a commit component behavior specification specifying a commit behavior with a data store object component parameter," (Figure 1 reference 104, 238 and column 13 lines 27-36, wherein data is extracted based on catalog keys)

"the data store object component comprising: a get value component behavior specification specifying a get value behavior with a data object attribute index parameter;" (column 14 lines 34-46, column 15 lines 11-19 wherein a first record is extracted)

"a get object component behavior specification specifying a get object behavior with a data object attribute index parameter;" (column 15 lines 8-25, wherein catalog key is used that identifies a record, based on attributes)

"and a get list component behavior specification specifying a get list behavior with a data object attribute index parameter;" (column 14 lines 38-46, column 34-45 wherein an adaptor extracts data from a catalog)

"and each provider plug-in further comprises at least one provider object component, and each provider object component is configured with: a get value behavior conforming with the get value component behavior specification of the provider object interface;" (column 15 line 55-64)

"a get object behavior conforming with the get object component behavior specification of the provider object interface;" (column 16 lines 40-51)

"a get list behavior conforming with the get list component behavior specification of the provider object interface;" (column 16 lines 40-58)

"and an index of attributes of at least one of said at least one data object."

(column 15 lines 33-45)

As per claim 3, Tamboli teaches "the provider object interface further configured with: a set value component behavior specification specifying a set value behavior with a data object attribute index parameter;" (column 15 lines 4-20)

"a set null value component behavior specification specifying a set null value behavior with a data object attribute index parameter;" (column 17 lines 33-44)

"a null value test component behavior specification specifying a null value test behavior with a data object attribute index parameter;" (column 17 lines 45-61)

"and a populated value test component behavior specification specifying a populated value test behavior with a data object attribute index parameter." (column 17 lines 45-67)

As per claim 4, Tamboli teaches "the object-oriented heterogeneous data store interface further comprises at least one data store object component, wherein each data store object component corresponding to a data store object;" (Figure 1 reference 116, 244, column 8 lines 27-50, and column 13 lines 14-26)

"and the provider interface further comprises: a connect component behavior specification specifying a connect behavior;" (column 14 lines 11-23)

"a disconnect component behavior specification specifying a disconnect behavior;" (column 17 lines 8-23)

"and a commit component behavior specification specifying a commit behavior with a data store object component parameter." (column 20 lines 11-23)

As per claim 5, Tamboli teaches "each data store object component comprises

a data store operation attribute;" (Figure 1 reference 116, 244 , column 8 lines 27-50,

and column 13 lines 14-26)

"each provider component is further configured with a commit behavior

conforming to the commit component behavior specification of the provider interface;"

(column 9 lines 40-54)

"and the data store operation attribute of the data store object component

parameter of the commit behavior of the provider component indicates a data store

operation to occur during the commit." (column 9 lines 54-61)

As per claim 6, Tamboli teaches "the object-oriented heterogeneous data store

interface further comprises: for each data store object stored in each data store, a data

store object component; and a data store component corresponding to each data store

configured to provide a subset of data store object components in response to the query

component." (Figure 1 reference 116, 244, column 8 lines 27-50, and column 13 lines

14-26, wherein a user interface in a data integration application communicates with

adaptors to read data from multiple data repositories).

As per claim 7, Prompt teaches "the query component is configured with: an add

expression behavior having: at least one query term parameter;" (column 28 lines 58-

66)

"and a query operator parameter;" (column 28 line 64 – column 29 lines 4)

"and an add conjunction behavior having a query conjunction parameter."

(column 29 lines 4-15)

As per claim 8, Prompt teaches "the add expression behavior of the query component further has a query component parameter." (column 19 lines 36-47)

As per claim 9, Tamboli teaches "each data store object stored in said at least one data store comprises at least one data object attribute;" (column 16-35, column 15 line 26-33)

"the object-oriented heterogeneous data store interface further comprises a data store object component corresponding to each data store object stored in each data store;" (Figure 1 reference 116, 244 , column 8 lines 27-50, and column 13 lines 14-26)

"and each data store object component of said object-oriented heterogeneous data store interface comprises a field list attribute comprising a field specification for at least one data object attribute of the data store object corresponding to the data store object component, the field specification comprising a defer property specifying that retrieval of the data object attribute is deferrable." (column 7 line 36 – column 8 line 13 and column 15 line 33-54)

As per claim 10, Tamboli teaches "said at least one data store object attribute comprises a data object attribute referencing a list of data store objects stored in said at least one data store;" (column 10 line 59-67, column 11 lines 17-28, column 12 lines 23-34, column 15 lines 26-45, wherein a catalog holds metadata for data repositories)

"and the field specification for the data object attribute referencing the list of data store objects further comprises a schema path property for retrieving said list of data store objects from said data store specifying, at least: a type of data object in the list of data objects;" (column 12 lines 23-34)

"a first attribute of each data object in the list of data objects;" (column 13 lines 27-36)

"a second attribute of the data object corresponding to the data store object component containing the field specification; "(column 13 lines 37-53)

"and a relationship between the first attribute and the second attribute." (column 13 lines 53-65)

As per claim 11, Tamboli teaches "the schema path property specifies: more than one type of data object;" (column 16 lines 40-58)

"and at least one relationship between attributes of each data store object." (column 16 lines 3-29)

As per claim 12, Tamboli teaches "a data store object source code generator configured to generate object-oriented programming language source code for each data store object component of the object-oriented heterogeneous data store interface." (column 7 lines 36-60, column 10 lines 32-58)

As per claim 29, Tamboli teaches "and further comprising, for each type of data store, a provider plug-in to the object-oriented heterogeneous data store interface, each provider plug-in comprising at least one provider component configured with a query behavior conforming to the query component behavior specification of the provider interface." (Figure 1 reference 102, 124, 204, column 8 lines 27-50, column 13 lines 14-26 wherein an adaptor is made for each data repository to communicate with a user interface)

Tamboli does not teach "a query component; and a provider interface comprising

a query component behavior specification specifying a query behavior with a query

component parameter;" Prompt teaches ""a query component; and a provider interface

comprising a query component behavior specification specifying a query behavior with a

query component parameter;" (column 19 lines 18-53, wherein querying multiple

databases is achieved specifying an object and broken down into commands embedded

in the query). It would have been obvious for one of ordinary skill in the art to combine

Tamboli's system to read and transfer data between multiple databases that use

different data formats with Prompt's ability to query data in multiple databases using a

generated query in compatible format. This gives the user the advantage of being able

to communicate more information between databases that utilize different data formats.

The motivation for doing so would be to provide a user with a finer level of granularity

when accessing multiple divergent database sources. (column 5 lines 3-20)

As per claim 30, Tamboli teaches "for at least one provider plug-in, a

corresponding data store object source code generator plug-in capable of generating

data store objects for the type of data store associated with the provider plug-in."

(Figure 5, column 10 lines 32-58, column 16 line 40 – column 17 line 67)

As per claim 31, Tamboli teaches "the graphical representation of each data

store object comprises a security policy designation." (column 12 line 18 – column 13

line 26

10.   Claims 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Prompt et al. (US Patent 6,985,905 B2) in view of Tamboli et al. ("Tamboli" US Patent

6,792,431)

        As per claim 13, Prompt teaches "A computer readable storage medium having

stored thereon computer-executable instructions for performing a method" (see

Abstract)

        "comprising: instantiating a first query component in a plurality of query

components of an object-oriented heterogeneous data store interface, each query

component of the object-oriented heterogeneous data store interface having an add

expression behavior," (column 19 lines 36-47, wherein a query is broken down by

commands from a command parser)

        "the add expression behavior having: at least one query term parameter;"

(column 19 lines 17-27, wherein a query includes a request for a query unit)

        "and a query operator parameter;" (column 19 lines 27-35, wherein an

Information Resource Locator is included in the query)

        "adding a query expression to the first query component with the add expression

behavior of the first query component;" (column 29 lines 4-15, wherein a query

generator assembles a query to database)

        Prompt does not teach "and providing the first query component to a data store

component of the object-oriented heterogeneous data store interface." Tamboli teaches

""and providing the first query component to a data store component of the object-

oriented heterogeneous data store interface." (Figure 1 reference 116, 244 , column 8 lines 27-50, and column 13 lines 14-26, wherein a user interface in a data integration application communicates with adaptors to read data from multiple data repositories). It would have been obvious for one of ordinary skill in the art to combine <u>Prompt</u>'s ability to query data in multiple databases using a generated query in compatible format with <u>Tamboli</u>'s system to read and transfer data between multiple databases that use different data formats. This gives the user the advantage of being able to use a user interface in data integration application when reading data from multiple different data sources. The motivation for doing so would be to ease access to data across structure types that is flexible and dynamic. (column 1 lines 57-67)

As per claim 14, <u>Prompt</u> teaches "each query component further has: a query conjunction behavior;" (column 31 lines 31-48)

"a begin group behavior; and an end group behavior" (column 31 lines 31-42 and column 32 lines 9-15, wherein table values are used to define the queried object)

"and the method further comprises: adding a query conjunction to the first query component with the add conjunction behavior of the first query component;" (column 32 lines 9-18)

"adding a begin group to the first query component with the begin group behavior of the first query component; and adding an end group to the first query component with the end group behavior of the first query component." (column 32 lines 18-29)

As per claim 15, <u>Tamboli</u> teaches "each query component specifies a subset of enterprise data objects;" (column 26 lines 16-31)

"each query component further has: a get extensible markup language (XML) behavior;" (column 28 line 58 - column 29 line 15)

"and a set from extensible markup language (XML) behavior;" (column 27 lines 27-45)

"and the method further comprises obtaining an extensible markup language (XML) representation of the subset of enterprise data objects specified by the first query component with the get extensible markup language (XML) behavior of the first query component." (column 29 lines 1-15)

As per claim 16, <u>Prompt</u> teaches "the method further comprises instantiating a second query component of the object-oriented heterogeneous data store interface;" (column 44 lines 25-36)

"and the query expression added to the first query component comprises the second query component." (column 44 lines 37-44, column 44 line 65 – column 45 line 11)

As per claim 17, <u>Prompt</u> teaches "each query component specifies a subset of enterprise data objects;" (column 19 lines 36-47)

"and the query expression added to the first query component specifies a set of values, the set of values comprising values of a specified attribute of the subset of enterprise data objects specified by the second query component." (column 19 lines 36-59)

As per claim 18, <u>Tamboli</u> teaches "one of a set of valid query operators is provided as the query operator parameter of the add expression behavior of each query

component of the object-oriented heterogeneous data store interface;" (Figure 1

reference 104, 238 and column 13 lines 27-36)

"and the set of valid query operators comprises: an attribute contains (Contains)

query operator that tests if a data object attribute specified by a first query term contains

a value specified by a second query term;" (column 15 lines 8-25)

"a value within (Within) query operator that tests if a value specified by the first

query term is within a set of values specified by at least one subsequent query term;"

(column 14 lines 38-46, column 34-45 wherein an adaptor extracts data from a catalog)

"a Has query operator that tests if a data object specified by the first query term

has at least one of a set of data objects specified by said at least one subsequent query

term;" (column 17 lines 45-67)

"and a null test (IsNull) query operator that tests if the data object attribute

specified by the first query term has a null value." (column 17 lines 45-61)

As per claim 19, <u>Tamboli</u> teaches "each query component specifies a subset of

enterprise data objects;" (Figure 1 reference 116, 244, column 8 lines 27-50, and

column 13 lines 14-26)

"and the method further comprises receiving a set of data store object

components of the object-oriented heterogeneous data store interface from the data

store component as a result of providing the first query component to the data store

component," (column 7 lines 36-60, column 10 lines 32-58)

"each data store object component in the set of data store object components

corresponding to an enterprise data object in the subset of enterprise data objects

specified by the first query component." (Figure 1 reference 116, 244, column 8 lines 27-50, and column 13 lines 14-26)

As per claim 20, Tamboli teaches "each data store object component comprises a field list attribute comprising a field specification for at least one data object attribute of the data object corresponding to the data store object component," (column 12 lines 23-34)

"the field specification comprising a defer property specifying that retrieval of the data object attribute is deferrable." (column 7 line 36 – column 8 line 13 and column 15 line 33-54)

As per claim 21, Tamboli teaches "said at least one data object attribute comprises a data object attribute referencing a list of data objects stored in said at least one data store;" (column 10 line 59-67, column 11 lines 17-28, column 12 lines 23-34, column 15 lines 26-45, wherein a catalog holds metadata for data repositories)

"and the field specification for the data object attribute referencing the list of data objects further comprises a schema path property specifying, at least: a type of data object in the list of data objects;" (column 12 lines 23-34)

"a first attribute of each data object in the list of data objects;" (column 13 lines 27-36)

"a second attribute of the data object corresponding to the data store object component containing the field specification; "(column 13 lines 37-53)

"and a relationship between the first attribute and the second attribute." (column 13 lines 53-65)

As per claim 22, <u>Tamboli</u> teaches "the schema path property specifies: more than one type of data object;" (column 16 lines 40-58)

"and at least one relationship between attributes of each data object." (column 16 lines 3-29)

Response to Arguments

11.   Applicant's arguments, see page 17, filed 9/6/2006, with respect to the rejected claims 13-22 have been fully considered and are not persuasive. While the amendments to the claims overcomes the non-statutory category rejection in regards to the computer readable medium being non-statutory, Independent claims 1 and 13 are still non-statutory because they fail to produce a tangible result. The rejection of claims 13-22, in regards to 35 USC 101, have been overcome, but a rejection of claims 1-5, 7-11, and 13-14, in regards to 35 USC 101, has been raised.

12.   Applicant's arguments with respect to claims 1-31, in regards to 35 USC 102(b) have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

14.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dangelino N. Gortayo whose telephone number is

(571)272-7204. The examiner can normally be reached on M-F 7:30-4:30.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dangelino N. Gortayo   Tim T. Vo
Examiner   SPE

Primary Examiner
12/11/06

TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100